

4.6 Traffic and Transportation

4.6.1 Environmental Setting

Affected Environment

The traffic conditions provided in Final EIR and Final EIS Section 3.13.2 remain valid and representative of existing roadways providing regional and local access to Segments 5, 6, 7, 8, 10 and 11. Modified Project ground transportation activities (outside of the Approved Project right-of-way) are primarily limited to delivery of marker balls and aviation lights (and associated infrastructure, such as power sources) to helicopter assembly yards, as well as nominal increases to construction worker daily traffic trips. While average daily traffic (ADT) counts provided within the Final EIR and Final EIS (Section 3.13.2) may have changed slightly as a result of general regional growth and development projects since completion of the Final EIR (2009) and Final EIS (2010), as described below, the focus of this SEIR/SEIS traffic and transportation analysis is on Modified Project activities that may potentially impact air navigation and aviation safety.

Modified Project activities do not alter the number or location of roadways crossed by the Project, as presented within Final EIR and Final EIS Section 3.13.2, Tables 3.13-4 through 3.13-9. While improvements to public and private roadway may have occurred within or in close proximity to Segments 5, 6, 7, 8, 10, and 11 since the Final EIR and Final EIS were published, these improvements would not substantially change the affected environment presented within Final EIR and Final EIS Section 3.13.2.

No additional public or private aviation facilities are known to have been established beyond those presented within Final EIR and Final EIS Section 3.13.2. From an airspace perspective, the greatest change to existing conditions since publication of the Final EIR and Final EIS is the development and use of temporary helicopter assembly yards serving Approved Project helicopter construction within Segments 6 and 11.

4.6.2 Applicable Laws, Regulations, and Standards

While Modified Project activities were not previously evaluated, they do not introduce new types of traffic or transportation sources/facilities that would have applicable regulations other than those already documented in Final EIR and Final EIS Section 3.13.3. The following identifies any newly promulgated or changes/updates to federal, State, or local regulations since the Final EIR and Final EIS were published.

Federal

No new federal regulations specific to Modified Project traffic and transportation activities have been promulgated since completion of the Final EIR and Final EIS. As discussed in Section 2 (Description of Project Modifications and Comparison to Approved Project), as required by Mitigation Measure L-2b (*Aircraft flight path and safety provisions and consultations*), SCE initiated consultation with the FAA subsequent to certification of the Final EIR by the CPUC and approval of the Special Use Authorization by the Forest Service. After SCE filed FAA Forms 7460-1 (as required by Mitigation Measure L-2b) for all applicable transmission structures and conductor spans, the FAA issued determinations recommending the installation of marker balls on certain transmission line spans and aviation lights on certain transmission structures. As such, while not a newly promulgated federal regulation, the filing of FAA 7460-1 forms and implementation of FAA recommendations (the subject of this SEIR/SEIS), constitute fulfillment of all applicable FAA regulations, as identified within Final EIR and Final EIS Section 3.13.3.1.

State

No new State laws, regulations, and standards relevant to traffic and transportation, as described in Final EIR and Final EIS Section 3.13.3, have been promulgated. An analysis of applicable State regulations pertaining to military restrictions is provided below in Section 4.6.4.

Local

No new local regulations specific to Modified Project traffic and transportation activities have been promulgated. The proposed activities under the Modified Project analyzed herein do not include any activity within Kern County, with the exception of one structure near Whirlwind Substation where aviation lighting has already been installed (see Figure 2.1-1h – Segment 10). As such, the Kern County regulatory setting (as provided in Final EIR and Final EIS Section 3.13.3.3) is not applicable.

4.6.3 Impact Analysis Approach

The impacts identified in this SEIR/SEIS are determined by comparing the impacts of the Approved Project, as disclosed in the Final EIR and Final EIS, to the impacts of the Approved Project with the implementation of the proposed modifications (i.e., Modified Project) (see Section 2.3).

4.6.3.1 Criteria for Determining Impact Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Modified Project. Appropriate criteria have been identified and utilized to make these significance conclusions. The following significance criteria for traffic and transportation were derived from previous environmental impact assessments and from the CEQA Guidelines (Appendix G, Environmental Checklist Form, Section IX) and were used to analyze the impacts of the Approved Project in the Final EIR and Final EIS. Impacts of the Modified Project would be considered significant and would require mitigation if:

- Criterion TRA1: A major roadway (arterial or collector classification) would be closed to through traffic as a result of construction activities and there would be no suitable alternative route available; or the installation of the transmission line within, adjacent to, or across a roadway would reduce the number of, or the available width of, one or more travel lanes during the peak traffic periods, resulting in a temporary substantial disruption to traffic flow and/or substantial increased traffic congestion.
- Criterion TRA2: An increase in vehicle trips associated with construction workers or equipment would result in an unacceptable reduction in level of service on the roadways in the Project vicinity.
- Criterion TRA3: Construction activities would temporarily restrict access to or from adjacent land uses and there would be no suitable alternative access.
- Criterion TRA4: Construction activities or operations would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, paramedic units) and there would be no reasonable alternative access routes available.
- Criterion TRA5: Construction activities would disrupt bus transit service and there would be no suitable alternative routes or stops.
- Criterion TRA6: Construction activities within, adjacent to, or across a railroad right-of-way would result in a temporary disruption of rail traffic.
- Criterion TRA7: Construction activities would impede pedestrian movements or bike trails in the construction area and there would be no suitable alternative pedestrian/bicycle access routes.
- Criterion TRA8: Construction activities or staging activities would increase the demand for and/or reduce the supply of parking spaces and there would be no provisions for accommodating the resulting parking deficiencies.

- Criterion TRA9: Construction should not be inconsistent with regional and local transportation plans.
- Criterion TRA10: An increase in roadway wear in the vicinity of the construction zone would occur as a result of heavy truck or construction equipment movements, resulting in noticeable deterioration of a roadway surface or other features in the road ROW.
- Criterion TRA11: A Project structure, crane, or wires were to be positioned such that it could adversely affect aviation activities.

Criterion TRA1 through TRA10 – Ground Traffic/Transportation Impacts

Installation of Marker Balls and Aviation Lights. Installation of marker balls on transmission line spans would involve primarily helicopter operation (or in limited circumstances, spacer cart), plus construction workers and support vehicles. Installation by spacer cart would require additional personnel for ground support, a personnel carrier for linemen and tools, and vehicles to carry materials and the cart. The amount of ancillary support and vehicles is greater for installation by spacer cart than installation by helicopter; however, this method would be used only in limited circumstances and in fact SCE has not currently identified any locations. As such, installation of marker balls by helicopter or spacer cart would result in at most a negligible increase in ground traffic to that estimated for the Approved Project in the Final EIR and Final EIS.

Installation of aviation lights would include the control unit enclosure, the communications system on the tower, and equipment for solar or distribution power. This equipment would be placed on the transmission structure concurrently with the construction of the transmission structure. Concurrent activities would result in a negligible increase in ground traffic. Accordingly, ground traffic related to installation of aviation lights would not appreciably increase.

Implementation of the APMs (TRA-1 through TRA-5) and mitigation measures (Mitigation Measures T-1a through T-8, and T-11) outlined in Final EIR and Final EIS Section 3.13.4.2 (see Appendix C) would ensure that the proposed modifications would not substantially increase the severity of effects from ground traffic identified in the Final EIR and Final EIS. O&M activities would have minimal impact on ground traffic due to the limited trips generated and infrequency of occurrence. Therefore, installation of marker balls and aviation lights would not result in new significant effects or substantially increase the severity of previously identified significant effects in the Final EIR and Final EIS for ground traffic. As such, no further analysis of Final EIR and Final EIS Criterion TRA1 through TRA10, which are all related to ground traffic impacts, is warranted for this Modified Project activity.

Engineering Refinements in Segment 8, Phase 3. Modifications to structures in Segment 8 would not result in additional workforce or truck trips, and therefore would not affect the analysis of construction or operational ground traffic previously presented in the Final EIR and Final EIS for the Approved Project. The engineering refinements would not result in a new significant impact or a substantial increase in the severity of a previously identified effect in the Final EIR and Final EIS for traffic and transportation. As such, no further analysis of Final EIR and Final EIS Criterion TRA1 through TRA10, which are all related to ground traffic impacts, is warranted for this Modified Project activity.

Criterion TRA11 – Aviation Impacts

Final EIR and Final EIS Section 3.13, Impact T-10 (Criterion TRA11), concluded that the “[f]inal design of the proposed transmission route would have to comply with FAA guidelines.” However, in light of the FAA recommendations, it has been determined that marker balls and aviation lights are needed to ensure safe and efficient utilization of the navigable airspace by aircraft and operation of air navigation facilities. Additionally, SCE is proposing to reduce the height of 21 structures in Segment 8, Phase 3, in response to the FAA’s concerns that certain transmission structures near the Chino Airport would interfere with the

instrument approach procedure. These elements were not previously considered or analyzed as part of the Approved Project.

Modified Project activities described above would have the ability to affect the aviation analysis presented in Final EIR and Final EIS Section 3.13, due to the increase in helicopter use and changes in structure heights. Additionally, routine maintenance of Modified Project components, which would include the replacement of marker balls utilizing helicopters, was not previously evaluated. As such, the analysis for traffic and transportation in this SEIR/SEIS is limited to Criterion TRA11 (Impact T-10). To ensure that the analysis of Criterion TRA11 includes a complete aviation hazards analysis of Modified Project activities, Impact T-10, which was previously limited only to transmission structures, has been modified to include catenaries (wire spans).

4.6.3.2 Approved Project Applicant-Proposed Measures (APMs)

APMs included within Final EIR and Final EIS Table 3.13-15 remain applicable to the Modified Project. APMs are a commitment by the Applicant (SCE) and are considered part of the Modified Project; therefore, the following impact analysis assumes that all APMs will be implemented.

4.6.3.3 Impact Assessment Methodology

The following analysis is focused on evaluating any changes in impacts from the Approved Project (as presented in the Final EIR and Final EIS) with the addition of the proposed modifications (i.e., Modified Project). As discussed above in Section 4.6.3.1, the aviation lights and marker balls, once installed, as well as engineering refinements to structures would have no permanent or substantial effect on the ground transportation analysis, as presented in Final EIR and Final EIS (Criterion TRA1 through TRA10). Routine maintenance of Project modification infrastructure would include replacement of the marker balls, which would occur similar to that of initial installation. This is a short-term and temporary activity and would have no permanent or substantial effect on the ground transportation analysis. Therefore, this traffic and transportation analysis is limited to aviation hazards (Criterion TRA11).

In evaluating potential changes, the impact analysis responds to the following questions for each impact statement discussion:

- Will the Project changes result in impacts not already identified in the Final EIR and Final EIS? If there are any new impacts, are they significant?
- Will the Project changes substantially increase the severity of any significant impacts identified in the Final EIR and Final EIS?
- Is there additional feasible mitigation available to reduce or avoid the significant impacts associated with the Project changes?

For the purposes of satisfying CEQA requirements, the significance of each impact statement are identified according to the following classifications: Class I: Significant impact; cannot be mitigated to a level that is less than significant; Class II: Significant impact; can be mitigated to a level that is less than significant; Class III: Adverse impact; less than significant; and Class IV: Beneficial impact.

4.6.4 Environmental Impacts and Mitigation Measures

Direct and Indirect Effects Analysis

A Project structure, crane, or wires were to be positioned such that it could adversely affect aviation activities (Criterion TRA11)

Impact T-10: Project transmission structures and catenaries (wire spans) could present an aviation hazard.

As previously discussed, upon review of the Approved Project, the FAA issued determinations recommending the installation of marker balls on certain transmission line spans and aviation lights on certain transmission structures. As such, the filing of FAA Form 7460-1 by SCE and the resulting recommendations (as addressed within this SEIR/SEIS) constitute fulfillment of applicable FAA regulations, as identified in Final EIR and Final EIS Section 3.13.3.1. However, the addition of these elements was not considered or analyzed as part of the Approved Project in the Final EIR and Final EIS, and therefore aviation hazard impacts of the Approved Project would not be reduced. The installation of marker balls and aviation lights as part of the Modified Project would ensure compliance with the FAA's recommendations which would provide for increased aviation safety by making hazardous structures (transmission structures and wire spans) more visible to pilots.

In addition to the marker balls and aviation lights, the FAA expressed concerns that certain structures near the Chino Airport would interfere with the instrument approach procedure; therefore, SCE has proposed engineering refinements to 21 structures in Segment 8, Phase 3 to reduce the structure heights consistent with FAA recommendations while maintaining required conductor ground clearance. These modifications ensure compliance with the FAA's recommendations and reduce the potential aviation hazard impacts associated with the Approved Project to the maximum extent.

As identified within Final EIR and Final EIS Section 3.13.2, per California Government Codes 65352, 65940, and 65944, local agencies are required to refer proposed projects to the appropriate branches of the US Armed Forces for review if the project meets at least one of the following criteria: (1) located within 1,000 feet of a military installation, (2) located beneath a low-level flight path, or (3) located within a special use airspace as defined in Public Resources Code Section 21098. However, only Project infrastructure located north of Segment 5 would meet the criteria set forth under California Government Codes 65352, 65940, and 65944. As such, further coordination (as required by Approved Project Mitigation Measure T-10) is not applicable to the Modified Project.

Operation and Maintenance. Marker balls would be replaced when color fading or surface deterioration (from weathering) has substantially reduced their visibility. The determination to replace marker balls would occur during annual O&M line inspections. Replacement of marker balls and standard O&M procedures for maintaining structure lighting operation as part of the Modified Project would ensure compliance with FAA recommendations and reduce potential aviation hazard impacts to the maximum extent.

CEQA Significance Conclusion

The installation and maintenance of marker balls and aviation lights, as well as permanent modifications to the affected structures in Segment 8 Phase 3, as part of the Modified Project would ensure compliance with the FAA's recommendations. As such, Modified Project activities would reduce aviation hazard impacts associated with Approved Project facilities and result in a beneficial impact (Class IV).

4.6.5 Cumulative Effects Analysis

Geographic Extent

The geographic extent for cumulative impact analysis related to transportation (limited to aviation hazards) are areas within approximately 0.5-miles of Modified Project activities. This geographic area accounts for the ability of other cumulative development within Segments 5, 6, 7, 8, 10 and 11 to combine with Approved Project facilities and create clusters of structures that could impact air safety. At distances greater than 0.5-miles from Modified Project activity areas, structures associated with other projects would be considered as an individual obstacle impacting airspace navigation.

Existing Cumulative Conditions

Land uses within 0.5-miles of Modified Project activity areas (Segments 5, 6, 7, 8, 10, and 11) vary from rural to urbanized. The area containing Approved Project Segments 7 and 8 (south of the ANF) is a highly urbanized area with the greatest potential for cumulative development to result in structures high enough to potentially create aviation hazards.

Reasonably Foreseeable Future Projects and Changes

Only those projects listed in Section 3, Figures 3.5-1a through 3.5-1c that have been identified within 0.5-miles of Segments 5, 6, 7, 8, and 11, and have the potential to include structures tall enough to require filing FAA Form 7460, are considered applicable cumulative projects. Due to the assumed height limitations of cumulative projects identified within 0.5-miles (residential, commercial, and industrial development), no cumulative projects are applicable.

Because marker ball replacement as part of Modified Project O&M activities would not commence until 10 to 25 years after initial marker ball installation, cumulative projects listed in Section 3 cannot account for all applicable cumulative development.

Cumulative Impact Analysis

- **Project transmission structures and catenaries (wire spans) could present an aviation hazard (Impact T-10).** The installation of marker balls and aviation lights ensures compliance with the FAA's recommendations and would reduce the Project's potential to present an aviation hazard. As such, Modified Project activities result in a beneficial contribution to cumulative aviation hazard impacts. Additionally, any potential future cumulative projects within 0.5 miles of Segments 5, 6, 7, 8, and 11 that would result in features over 200 feet in height or meet other FAA Form 7460-1 requirements would be required to submit a Notice of Construction to the FAA for review. Compliance with these procedures and implementation of the FAA's recommendations would ensure that potential impacts from cumulative development projects would not combine to result in a significant impact to civilian or military aviation activities (Class III).

Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

Modified Project activities would not result in adverse aviation hazard impacts. As such, Modified Project activities would not substantially increase or cumulatively contribute to the severity of cumulative aviation hazard impacts. No new mitigation is required.

4.6.6 Comparison of Alternatives

This comparison of alternatives focuses on the differences between the Approved Project (No Project Modifications/No Action Alternative) and the changes that would result with implementation of the Modified Project. Table 4.6-1 provides a side-by-side comparison, summarizing the analysis presented above in Sections 4.6.4 and 4.6.5.

Table 4.6-1. Comparison of Alternatives – Traffic and Transportation

Project Component / Impact	Approved Project (No Project / No Action Alternative)	Modified Project
Structures with Aviation Lights	0	90
Transmission Line Spans with FAA Marker Balls	0	276
Total Marker Balls	0	2,248
Max. Helicopter Hours/Day	241	251
Helicopter Use – Working Hours	13,971	14,799 (828 additional)
Total Helicopter Use (includes idle hours)	15,317	16,500 (1,183 additional)
Potential for Project transmission structures and catenaries (wire spans) to present an aviation hazard	Requires coordination with the FAA (Mitigation Measure L-2b), but does not include installation of marker balls, aviation lights, or reduced structure heights in the vicinity of Chino Airport.	Includes installation of marker balls aviation lights, and engineering refinements to structures near Chino Airport ensuring compliance with the FAA's recommendations and improving aviation safety.
Cumulative aviation hazard impacts	Coordination with the FAA (Mitigation Measure L-2b) reduces the Project's cumulative contribution to aviation hazard impacts, but does not include installation of marker balls, aviation lights, or reduced structure heights in the vicinity of Chino Airport.	Modified Project activities implement the FAA's recommendations resulting in a beneficial contribution to cumulative aviation hazard impacts.